

CLAIMS:

1. An amplifier circuit for amplifying an input signal and having a conduction angle of at least about  $180^\circ$ , said amplifier circuit comprising an amplifying transistor and an impedance-controllable dc bias circuit for biasing said amplifying transistor to obtain said conduction angle, said dc bias circuit having a self-bias boosting circuit having means for independently controlling an output impedance of the dc bias circuit and a quiescent current of the amplifier transistor and comprising a Wilson current-mirror integrated with a cascode current-mirror circuit to form an extended Wilson current -mirror circuit having an output coupled to a control terminal of said amplifying transistor by a resistor, and a capacitor coupled from said extended Wilson current-mirror circuit to a common terminal.
2. An amplifier circuit as in claim 1, wherein said amplifier circuit is a Class AB amplifier circuit.
3. An amplifier circuit as in claim 1, wherein said cascode current-mirror circuit comprises a first pair of transistors having main current paths connected in series, said output being taken from a common point of said series connection, a second pair of transistors having main current paths connected in series, and a third pair of transistors having their main current paths connected in series, with a "bias" current source being coupled from a power supply terminal of the amplifier to a control electrode of a first transistor of said first pair of transistors for controlling said output impedance, and a "class" current source being coupled from said power supply terminal to said first, second and third pairs of transistors for controlling said quiescent current.
4. An amplifier circuit as claimed in claim 3, further comprising a resistor coupled in series with and between said third pair of transistors.
5. An amplifier circuit as in claim 4, wherein the main current paths of said first, second and third pairs are each connected to said common terminal.

6. An amplifier circuit as in claim 5, further comprising a diode-connected transistor being connected between said "bias" current supply and said common terminal.